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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,652	01/25/2002	Hidenobu Ohya	02040/HG	3492

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EXAMINER

SCHWARTZ, PAMELA R

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/057,652	OHYA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Pamela R. Schwartz	1774	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,15,16 and 18-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-14 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-26 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/12/03</u> . | 6) <input type="checkbox"/> Other: _____  |

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1. Applicant's election without traverse of claims 1, 4-14 and 17 in Paper No. 20031229 is acknowledged.
2. Claims 1, 4-14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (6,485,812). The reference discloses an ink jet recording sheet comprising at least one ink-receiving layer comprising inorganic particles and binder resin (see the abstract). The fine inorganic particles may be silica or alumina (see col. 8, lines 29-48). The binder resin may be copolymer latex such as styrene butadiene copolymer, acrylic polymer latex, or vinyl latex such as ethylene-vinyl acetate copolymer (col. 11, line 60 to col. 12, line 20 and col. 12, lines 31-35). A latex polymer will inherently be in the form of fine particles. The content of the binder resin is preferably 0.1 to 100 parts by weight per 100 parts of fine inorganic particles. The ink-receiving layer may be coated in installments. The coating amount of ink receiving layer is preferably from 1 to 50 g/m<sup>2</sup>, and in the case in which an upper layer of silica is formed over a layer of alumina, the silica layer has a coating weight of 0.05 to 10 g/m<sup>2</sup> (see col. 17, lines 18-45). It would have been obvious to one of ordinary skill in the art to form multiple ink receiving layers as disclosed in the reference and a layer having pigment content between 30 and 70% by weight because such layers are consistent with the ratio of pigment and binder components for the layer disclosed by the reference.
3. Claims 1, 4, 7, 10, 13, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over either patent to Sunderrajan et al (6,635,319 or 6,347,866). See the abstract, col. 2, lines 44-51 and col. 3, lines 3-12 and 63-67 of 6,635,319 and the

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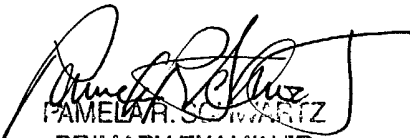
abstract, col. 2, line 58 to col. 3, line 13 and col. 4, line 7-17 of 6,347,866. The references disclose an ink jet recording element that may have multiple ink receiving layers comprising inorganic pigment in amounts of about 50% to 95% by weight and thermoplastic particles in amounts from 2 to 20% by weight. Since the reference discloses that the ink receiving surface may have multiple coating layers, it would have been obvious to one of ordinary skill in the art to form a medium with two or more coating layers having a composition falling within the ranges disclosed by these references.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela Schwartz whose telephone number is (571) 272-1528.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on (571) 272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRSchwartz  
April 3, 2004

  
PAMELA R. SCHWARTZ  
PRIMARY EXAMINER